

## WE CLAIM:

1. A method of determining a connection between a data emitting device and a network device which may carry the data, wherein the network device is comprised of a store for a data source address of a last frame transmitted to the network device and an input traffic count comprising:

- (a) periodically reading the data source address,
- (b) periodically reading the input traffic count,
- (c) determining whether the data source address has always stayed the same,
- (d) in the event the data source address has always stayed the same, determine whether the traffic count has exceeded a predetermined threshold,
- (e) in the event the result of step (d) is true, indicate that the data source address identifies with acceptable probability a data emitting device directly connected to the network device.

2. A method as defined in claim 1, including:

- (f) in the event the result of step (c) is false, indicate that a device identified by the data source address is directly connected to the network device.

3. A method as defined in claim 2 in which the store is an address resolution table of a communications routing device.